## 1 Analyzer

The Analyzer is what analyzes the syntax trees generated by the Parser and ensures that everything is valid.

```
module Analyzer where
import Data.Map (Map)
import qualified Data.Map.Strict as Map
import AST
import Result
```

The analyze function is the heart of this whole system, kicking off the whole process of inferring and checking types. If all works out correctly, it returns a True. If not, an AnalysisError.

```
\begin{array}{l} \texttt{analyze} \ :: \ \texttt{AST} \ \to \ \texttt{Result Bool} \\ \texttt{analyze} \ \texttt{ast} \ = \ \texttt{Ok True} \end{array}
```